

the last abdominal segment, in the position of the gonopods of the adult louse. The two outer of these are much longer than the inner one.

Legs stout. First pair as long as but much more slender than the others; its tarsal claw long, slender, sharp and much curved, equal in length to the tarsal segment that bears it; tibial thumb small but bearing a straight, sharp spine about one-half as long as the tarsal segment, and two longer setae. Second pair of legs enlarged, equal to the third; tibia broader than femur and with well-developed tibial thumb bearing at its tip a spine and a much longer seta; tarsus longer than tibia and bearing on its inner surface four tooth-like, gripping tubercles; tarsal claw flattened, more or less scoop-like and provided on its inner surface with two large and one small gripping tubercles. Third legs almost complete duplicates of the second, probably a little larger.

Length, 0.60 mm.; width, 0.33 mm.

Type host and type locality.—*Gorilla beringeri*, from eastern Belgian Congo.

Type.—Cat No. 40161, U. S. N. M.

This species differs in the first nymphal stage from *P. pubis*, the only other species in the genus *Phthirus*, in a number of characters. The third segment of the antenna is much stouter than in *pubis*; the legs are shorter; the tarsal claws of the second and third legs are much shorter than the tarsi, have three gripping tubercles and only slight indications of terminal swellings; while these claws in *pubis* are about equal to the tarsi in length, have five gripping tubercles, in addition to terminal enlargements. Only first nymphs and eggs obtained from two skins of *Gorilla beringeri* (U. S. N. M. 239883 and 239884) obtained by Benjamin Burbridge during his expedition for taking moving pictures of the gorilla in eastern Belgian Congo. I collected the material before the skins were tanned but was unable to obtain adult specimens although scores of nits were present on both skins. The nits were placed over many parts of the body, showing that this species is a true body louse and not restricted chiefly to the pubic region like *P. pubis*. The significance of this species taxonomically and from the standpoint of phylogeny of both the higher lice and their hosts will be left for consideration in another paper in which it is planned that photographs of the first nymphal instars of both *pubis* and *gorillae* will be given.

A BLIND BEETLE EXCAVATED FROM AN EGYPTIAN CITY'S RUINS DATING BETWEEN 117 AND 235 A. D.

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Fragments of a curious, minute, blind and wingless beetle were referred to the writer from the National Museum in the belief that they might represent a highly specialized subterranean form of Tenebrionid, and the result of its examination

while not permitting positive assignment in either this family nor in the Colydiidae, permits me to record its observed structure only by proposing new generic and specific names.

Curious also is the way in which so small a species, whose structure and habits suggest that its entire existence may be passed below the surface of the ground, happened to attract the attention of an entomologist. Headed by Prof. A. E. R. Boak during the winter of 1924/25 the Egyptian Expedition of the University of Michigan made investigations at Kom Washim, Fayoum Province, and brought back the biological, zoological and botanical material found in their archaeological excavations. One of the samples submitted to Mr. H. S. Barber for identification consisted of some large, oval, woody, stem-galls measuring 35 x 28 x 24 mm., having a round exit hole about 7 mm. in diameter near one end of each. From these he believed adults of a large weevil (perhaps *Lixus* or *Cleonus*) had issued, and hoping to prove this guess he sectioned certain specimens and searched for remnants of the larval head-capsule of the gall-maker but found only fragments of a clothes moth larva and the beetle here discussed, which must have crawled into the cavity some time since the galls became buried. According to information from Prof. Boak, the Greco-Roman town of Karenis, the ruins of which were being investigated, was inhabited for about 700 years, having been abandoned early in the fifth century, but the galls were found in a private house in the intermediate layer of the city's ruins, which layer can be dated between the years 117 and 235 A. D. This shows that the galls have been buried for perhaps 1700 years, and as such chitinous fragments decompose with extreme slowness it is very likely that the beetle died there a very long time ago. The rarity and accidental nature of our glimpses of this blind, wingless, subsoil fauna beneath our feet makes the details of each such critically observed case worthy of record.

The specimens received, although very imperfect, comprise most of the exoskeleton of one individual but are in three parts as follows: Head and prothorax, with both anterior legs, greater part of the right antenna and only the first joint of the left; elytra, meso- and metathorax with only the right middle leg; the ventral abdominal segments. Extremely fine pellets of excrementitious matter of some other minute insect adhere to the fragments. On account of the very small size of the beetle and of its being a unique, no attempt could be made to put the appendages in position for study and cleaning was out of the question.

After searching the available literature without identifying or associating the species with any that are known, it has been assumed that it is new.

THAUMAPHRASTUS, new genus.

(θαύμα, (a wonderful thing) + αφραστός (unexpected).)

Head relatively small, somewhat deflexed, occipital condyle large, eyes absent. Antennae arising from the sides of the front; first two joints globular, the first larger than the second, each larger than any following joint; third and fourth smaller and subequal in size; the remaining three joints present small and equal in width. Antennae when at rest received in grooves bounded above by the side of the head, the marginal bead of which is continuous with the thickened and arcuate posterior border of the antennal fossa and, below by the rather prominent margin of the buccal fissure which is continuous with the side of the front and forming a rectangle therewith. Mentum apparently attaining the mandibles, hiding the ligula and labial palpi; maxillary palpi small, terminal joint pointed; basal joints filling the buccal fissure. Genae not in the least prominent and forming the floor of the antennal grooves.

Pronotum relatively large and inflated anteriorly to receive the occipital condyle; apex semicircularly arcuate and prominent anteriorly. Propleura with a shallow oval impression anteriorly.

Prosternum very short in front of the coxae, not entering between them except for a very short distance. Anterior coxae contiguous, small, slightly prominent, cavities open posteriorly.

Elytral suture connate, scutellum not entering between the elytra. Epipleura present, defined superiorly by a fine raised line extending from the humeri to the elytral apex; surface in apical two-thirds continuing the line of the discal curve; in basal third more abruptly deflexed with the surface plane beneath the humeri. Mesosternum slightly prominent along the median line, and slightly ogival when viewed transversely, surface slightly impressed and asperulate in front of the coxae; suture between the meso- and metasternal side pieces visible and slightly oblique, epimera not recognizable from the episternum; surface obliquely impressed in front of and parallel to the suture, the impression beginning just in front of the humeri. Metasternum broad, short, with lateral surface quite deeply impressed anteriorly at angle, behind and lateral to the middle coxae. Episternum oblong, quite equal in width throughout, metasternal suture distinct; epimera present, apparently triangular, apex at the hind coxa. Middle coxal cavities rounded and narrowly separated by a mesosternal process; coxae small and not prominent, trochantines apparently present. Posterior coxal cavities oval attaining the episternum laterally, distance from the elytral margin quite equal to the width of the coxa; coxae moderately widely separated by the obtuse process of the first abdominal segment.

Tibial spurs present and minute in size. Anterior and middle tarsi five-jointed. Abdominal segments five, first three apparently connate.

Thaumaphrastus karanisensis, new species.

Form oblong, color castaneous to castaneo-piceous.

Head obtusely angulate and prominent between the antennae, declivous anteriorly; broadly and arcuately impressed behind the eyes, less so on the vertex; surface finely and sparsely punctate. Epistomal area rather narrow, slightly impressed and piceous in color; apex broadly and moderately arcuately

emarginate, suture not distinct, surface finely punctate. Labrum short, feebly and arcuately emarginate at apex, angles apparently rounded. Mandibles in adduction, the left cleft at apex, cusps sharp and unequal. Mentum apparently oblong with lateral edges slightly prominent. Antennal fossa not beaded anteriorly, but rather coarsely margined posteriorly and continuously so with the sides of head. Antennal joints closely articulated.

Pronotum about a fourth wider than long; apex broadly, evenly and semi-circularly arcuate, continuously so with the sides, the latter broadly arcuate, becoming broadly and feebly sinuate, as well as moderately convergent in about basal third, margins briefly subparallel before the small, nearly rectangular basal angles, a marginal bead not discernable, the lateral edge apparently extremely finely, microscopically denticulate; base lobed, lobe broadly and strongly arcuate, feebly and broadly sinuate laterally within the angles; disk strongly convex and evidently inflated anteriorly, much less so posteriorly, more strongly declivous antero-laterally than posteriorly, finely and sparsely punctate, punctures not denser laterally, each with a very minute pale hair. Propleura microscopically sculptured.

Elytra conjointly, broadly, evenly and quite semi-circularly rounded at apex, continuously so with the feebly arcuate sides which are slightly convergent to the humeri; the latter rather narrowly rounded and not in the least prominent laterally; base broadly and arcuately emarginate, not margined, but very narrowly rounded and inflexed; disk rather depressed, estriate, feebly convex, arcuately declivous at the sides, more broadly and evenly so posteriorly, at the humeri the surface is more abruptly and rather sharply inflexed; surface quite smooth, sparsely, evenly punctate, punctures fine and slightly oval longitudinally, shallow and not impressed, slightly larger basally; floor of the punctures whitish giving the impression of the presence of a minute hair. Epipleura moderately wide, plane and nearly vertical in basal third, thence gradually taking the curve of the elytral disk, gradually narrowing to apex. Parapleura impunctate. Meta-sternum sparsely and relatively coarsely punctate.

Abdomen subglabrous, first ventral segment apparently as long or longer than the second, third and fourth taken together; the fifth broadly rounded at apex, evenly convex and about as long as the third and fourth taken together; intercoxal process of first segment obtusely pointed at apex, sides slightly arcuate, a little wider at base than long. First segment sparsely, finely and distinctly punctate; remaining segments very finely and sparsely punctate.

Legs.—Left middle and posterior two missing. Anterior legs stout, femur and tibia subequal in length, the former slightly swollen and sparsely punctate; tibia gradually widening from base to apex, apical margin fringed with exceedingly fine, short spinules, external edge not denticulate; spurs short and fine. Tarsi rather stout and compact; first joint short, rather wider than long; second third and fourth quite equal in length, fifth feebly elongate narrowing slightly apically; planta with fine hair-like setae along the margins. Ungues small, slightly arcuate and sharp. Right middle femur and tibia sparsely pubescent or extremely finely spinulose.

Measurements.—Length about 1.2 mm.; width .5 mm.

Named from a unique, No. 24-5024B. Collected by the Ann Arbor Expedition.

Thaumaphrastus can not positively be referred to the right one of the great Complexes on account of the absence of the posterior tarsi. The facies of the insect forbids its being placed in one of the heteromerous series unless it be the Tenebrionidae or Monommidae. It can not belong to the former on account of the open anterior coxal cavities, and besides, the antennae are evidently capitate as indicated by the presence of an oval depression on the anterior surface of the propleura in line with the antennal grooves.

In facies the species resembles *Aglenus* Gyll. of the Colydiidae and not at all in harmony with the Monommidae. It probably belongs to the Isomera, and here it is difficult to decide on the Series on account of the imperfect condition of the insect. It can with certainty be said not to belong to the Adephaga, Lamellicornia or Phytophaga. There remain then only the Clavicornia and Serricornia. The facies and structure affiliates the species with the Clavicornia, and yet it is in discord with all but possibly the Cryptophagidae and Colydiidae. It may belong to a different and closely related family or genus unknown to the North American fauna. The affinities will have to be determined by some student acquainted with the northern African or Mediterranean fauna. If the species should be already known, it is hoped that the present report will facilitate the recognition of this interesting blind beetle.

EXPLANATION OF THE FIGURES, PLATE 6.

1.—Dorsal view of pronotum and head; 2.—Dorsal view of the elytra; 3.—Anterior view of the head, showing the epistomal region and labrum; 4.—Diagrammatic side view of head and apical portion of the propleura, showing: (a) antennal fossa; (b) antennal groove and (c) position of the oval depression on propleura near apex; 5.—Anterior leg; 6.—Ventral view of the prothorax; 7.—Ventral view of the meso- and metathorax.

TWO NEW SPECIES OF HARMOLITA (HYMENOPTERA).

BY W. J. PHILLIPS, *Entomologist, Bureau of Entomology, U. S. Department of Agriculture.*

This paper adds two species to the list of our North American jointworms. The genus *Elymus* incidentally is found to be the host for one of these. This genus is already by far the most favored group of host plants among our wild and cultivated grasses. The list of *Harmolita* now inhabiting our various species of *Elymus* is as follows: *H. ovata*, *H. hesperus*, *H. rufipes*, *H. elymi*, *H. elymoxena*, *H. elymophila*, *H. elymophthora*, *H. elymivora*, *H. elymicola*, *H. elymophaga*.